

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (original): A method for filtering contaminated air, which comprises:

passing contaminated air through a filter and separating contaminants by consecutively:

separating grease and water;

drying air still containing a residual moisture; and

adsorbing odors.

Claim 2 (original): The method according to claim 1, which further comprises carrying out the separating, drying, and adsorbing steps within a filter housing.

Claim 3 (original): The method according to claim 1, which further comprises carrying out the drying step by drying the air with at least one of the group consisting of zeolites having a higher water affinity than active carbon, silicate

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

gel, slowly dissolving anorganic salts, and polymer-based adsorbers.

Claim 4 (original): The method according to claim 1, which further comprises carrying out the drying step by drying the air with materials selected from at least one of the group consisting of zeolites having a higher water affinity than active carbon, silicate gel, dissolving anorganic salts, and polymer-based adsorbers.

Claim 5 (original): The method according to claim 1, which further comprises carrying out the adsorbing step utilizing at least one of active carbon and zeolites.

Claim 6 (currently amended): The method according to claim 1, which further comprises collecting liquid and one of cyclically and continuously removing accumulated the collected liquid through a directly connected line.

Claim 7 (currently amended): The method according to claim 3, which further comprises collecting liquid and one of cyclically and continuously removing accumulated the collected liquid through a directly connected line.

Claim 8 (original): A device for carrying out the method of

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

claim 1, wherein:

a plurality of filter elements are provided for passing the contaminated air therethrough in an airflow direction and filter the air, said elements including a vortex filter, a grease separation filter, an air drying filter, and an odor filter consecutively disposed in said airflow direction.

Claim 9 (original): The device according to claim 8, wherein said device is a household fume exhaust device.

Claim 10 (original): The device according to claim 8, wherein said grease separation filter is formed from expanded metal.

Claim 11 (original): The device according to claim 8, further comprising:

a filter housing; and

said air drying filter and said odor filter being combined in a filter cartridge replaceably disposed at said filter housing.

Claim 12 (original): The device according to claim 8, wherein said vortex filter, said grease separation filter, said air

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

drying filter, and said odor filter are combined in a filter cartridge.

Claim 13 (original): The device according to claim 8, wherein said vortex filter has at least one discharge opening for discharging the grease and water separated in said vortex filter.

Claim 14 (currently amended): The device according to claim [[13]] 9, wherein said vortex filter has at least one discharge opening for discharging the grease and water separated in said vortex filter.

Claim 15 (original): The device according to claim 8, wherein that said air drying filter contains structures at which the contaminated air passes, said structures being selected from at least one of the group consisting of zeolites with a higher water affinity than active carbon, silicate gel, dissolving anorganic salts, and polymer-based absorbers.

Claim 16 (original): The device according to claim 12, wherein that said air drying filter contains structures at which the contaminated air passes, said structures being selected from at least one of the group consisting of zeolites with a higher water affinity than active carbon, silicate gel,

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

dissolving anorganic salts, and polymer-based absorbers.

Claim 17 (original): The device according to claim 12, wherein said air drying filter has salt crystals and an open-pored plastic foam material holding said salt crystals in position.

Claim 18 (original): The device according to claim 17, wherein said plastic foam material is open cell polyurethane foam.

Claim 19 (original): The device according to claim 15, wherein:

said vortex filter has at least one discharge opening for discharging the grease and water separated in said vortex filter; and

a salt solution accumulating in said air drying filter is discharged by way of said discharge opening.

Claim 20 (original): The device according to claim 16, wherein:

said vortex filter has at least one discharge opening for

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

discharging the grease and water separated in said vortex filter; and

a salt solution accumulating in said air drying filter is discharged by way of said discharge opening.

Claim 21 (original): The device according to claim 20, further comprising at least one of a collecting container and a drain line into which said discharge opening opens.

Claim 22 (currently amended): The device according to claim [[14]] 13, further comprising at least one of a collecting container and a drain line into which said discharge opening opens.

Claim 23 (original): The device according to claim 11, wherein said filter cartridge has a fill level indicator for a salt region of said cartridge.

Claim 24 (original): The device according to claim 12, wherein said filter cartridge has a fill level indicator for a salt region of said cartridge.

Claim 25 (original): An air filtering device, comprising:

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

a plurality of filter elements filtering contaminated air passed therethrough in an airflow direction, said elements including a vortex filter, a grease separation filter, an air drying filter, and an odor filter disposed consecutively in said airflow direction and thereby separating contaminants by consecutively separating grease and water, drying air still containing a residual moisture, and adsorbing odors.

Claim 26 (original): The device according to claim 25, wherein said grease separation filter is formed from expanded metal.

Claim 27 (original): The device according to claim 25, further comprising:

a filter housing; and

said air drying filter and said odor filter being combined in a filter cartridge replaceably disposed at said filter housing.

Claim 28 (original): The device according to claim 25, wherein said vortex filter, said grease separation filter, said air drying filter, and said odor filter are combined in a filter cartridge.

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

Claim 29 (original): The device according to claim 25, wherein said vortex filter has at least one discharge opening for discharging the grease and water separated in said vortex filter.

Claim 30 (original): The device according to claim 25, wherein that said air drying filter contains structures at which the contaminated air passes, said structures being selected from at least one of the group consisting of zeolites with a higher water affinity than active carbon, silicate gel, dissolving anorganic salts, and polymer-based absorbers.

Claim 31 (original): The device according to claim 28, wherein that said air drying filter contains structures at which the contaminated air passes, said structures being selected from at least one of the group consisting of zeolites with a higher water affinity than active carbon, silicate gel, dissolving anorganic salts, and polymer-based absorbers.

Claim 32 (original): The device according to claim 28, wherein said air drying filter has salt crystals and an open-pored plastic foam material holding said salt crystals in position.

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

Claim 33 (original): The device according to claim 32,
wherein said plastic foam material is open cell polyurethane
foam.

Claim 34 (original): The device according to claim 30,
wherein:

said vortex filter has at least one discharge opening for
discharging the grease and water separated in said vortex
filter; and

a salt solution accumulating in said air drying filter is
discharged by way of said discharge opening.

Claim 35 (original): The device according to claim 31,
wherein:

said vortex filter has at least one discharge opening for
discharging the grease and water separated in said vortex
filter; and

a salt solution accumulating in said air drying filter is
discharged by way of said discharge opening.

Claim 36 (original): The device according to claim 29,

Applic. No. 10/725,093

Amdt. dated July 26, 2004

Reply to Office action of April 26, 2004

further comprising at least one of a collecting container and
a drain line into which said discharge opening opens

Claim 37 (original): The device according to claim 35,
further comprising at least one of a collecting container and
a drain line into which said discharge opening opens

Claim 38 (original): The device according to claim 27,
wherein said filter cartridge has a fill level indicator for a
salt region of said cartridge.

Claim 39 (original): The device according to claim 28,
wherein said filter cartridge has a fill level indicator for a
salt region of said cartridge.